Dryden Research Library Newsletter March 2001

Dryden Research Library is located in Bldg. 4800 Room 2412. Contact us at Ext. 3702 or 3127. Check out our home page:

http://www.dfrc.nasa.gov/organizations/Library/index.html. You can emil Barbara Rogers or Cheryl Logan for any of your library needs. The library Newsletter is best viewed using Eudora 4.3.

For Your Information

We are in the process of obtaining a site license for electronic access to the AIAA journals and meeting papers. You will then be able to download these documents directly to your desktop. Look for an announcement soon.

Other electronic journals include the Elsevier Journals which can be accessed through the Science Direct link on the Library Home page. The IEEE/IEE Electronic Library link provides all their recent journals, standards, and conference proceedings in electronic format. Many NASA Reports can be downloaded electronically using the NASA Technical Report Server. Library searches can be performed using Aeronautics and Space Access Page or ASAP link. ASAP Registration is required for limited distribution reports. See Barbara Rogers for more information.

New Books

The Library has received several new books:

Nonlinear Dynamics And Statistics by Alistair I. Mees;

Sound Generation By Ducted Fans And Propellers As A Lifting
Surface Problem by Joannes B. Schulten;

The Map Catalog: Every Kind Of Map And Chart On Earth And Even Some Above It by Joel Makower;

<u>Financial Accounting: A Business Perspective</u> by Roger H. Hernanson;

Advances In Mssile Guidance Theory by Joseph Z. Ben-Asher and Isaac Yaesh;

An In-Flight Investigation Of Lateral-Directional Dynamics Of Cruising Flight by W G. Hall;

The Astronomical Almanac For The Year 2001;

The Weather Almanac by Frank E. Bair;

Jane's International ABC Aerospace Directory;

Current Medical Diagnosis & Treatment by Marcus A. Krupp;

Flight Research Problems Encountered And What They Should

Teach Us by Milton O. Thompson;

<u>Introducing Computers: Concepts, Systems, And Applications</u> by Robert H. Blissner;

<u>Mastering Technical Mathematics</u> by Norman H. Crowhurst;

Stress-Corrosion Cracking In High Strength Steels And In

Titanium And Aluminum Alloys by B. F. Brown;

Mechanical Behavior Of Materials: Engineering Methods For

<u>Deformation</u>, <u>Fracture</u>, <u>And Fatigue</u> by Norman E. Dowling;

<u>Understanding How Components Fail</u> by Donald J. Wulpi;

<u>Plastic Laminate Materials: Their Properties And Usage</u> by Norman E. Beach:

<u>Serious Play: How The World's Best Companies Simulate To Innovate</u> by Michael Schrage;

Systems Engineering Guidebook: A Process For Developing Systems And Products by James N. Martin:

<u>American X-Vehicles: An Inventory - X-1 To X-45</u> by Jay Miller And Dennis R. Jenkins;

<u>Tactical And Strategic Missile Guidance</u> by Paul Zarchan; <u>Introduction To Hypersonic Flow</u> by Ronald F. Probstein; <u>Hypersonic Flow Theory</u> by Wallace D. Hayes and Ronald R. Prostein;

Elementary Statistics With Applications in Medicine And The Biological Sciences by Frederick Enory Croxton; Semiconductor Device Technology by Malcolm E. Goodge

THIS MONTH IN HISTORY

- Mar. 10, 1948 Herb Hoover was the first NACA pilot and first civilian to fly supersonically in the X-1.
- Mar. 4, 1952 Joe Walker was first to fly variable-sweepwing X-5 to a full 60-degree angle. The concept has since been used on the F-14, F-111, and B-1 aircraft.
- Mar. 25, 1960 First NASA flight in an X-15 aircraft. Pilot was Joe Walker.
- Mhrch 5, 1970 First NASA checkout flight of YF-12A, Fitz Fulton pilot.
- Mar. 9, 1971 First flight of supercritical wing flown by NASA pilot Tom McMurtry. Unusual wing shape, tested on a modified F-8, increased flight efficiency and lowered fuel usage. The concept is now used widely on commercial and military aircraft.
- Mhr. 26, 1976 The NASA Flight Research Center was dedicated in honor of the late Hugh L. Dryden. NASA personnel numbered nore than 560.
- Mar. 9, 1993 NASA SR-71 flew on first science mission, taking a JPL ultraviolet camera to 85,000 feet for night photo studies. Flight was also first SR-71 night mission at Dryden.
- Mar. 18, 1994 10,000th research mission was logged by Dryden's Western Aeronautical Test Range (WATR), a flight with the F-18 HARV. The facility was developed in the 1950's to support the X-15 program
- Mar. 12, 1998 NASA's B-52 008 dropped the first X-38 atmospheric test vehicle for the first full test of its parafoil parachute. The parafoil deployed within seconds of the vehicle's release from an altitude of approximately 23,000 feet. The unpiloted X-38, with a lifting-body shape originally developed for the X-24A project in the early to mid-1970s, descended to a landing on Rogers Dry Lakebed. The

X-38 is an 80-percent-scale prototype of a crew return vehicle for the International Space Station.

Mar. 30, 2000 X-38 Vehicle 132 completed its third and final free flight. Launched from Dryden's B-52, it completed the highest, fastest, and longest X-38 flight to date. It was released at an altitude of 39,000 feet and flew freely for 45 seconds, reaching a speed of over 500 miles per hour before deploying its parachutes for a landing on Rogers Dry Lakebed.